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# Parents' perceptions about child abuse and their impact on physical and emotional child abuse: A study from primary health care centers in Riyadh, Saudi Arabia

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## Abstract:

**OBJECTIVE:** To determine perceptions of parents about child abuse, and their impact on physical and emotional child abuse.

**MATERIALS AND METHODS:** Two hundred parents attending three primary health care centers (PHCCs) in Riyadh serving National Guard employees and their families, were requested to participate in this survey. Data was collected by self administered questionnaire. Five main risk factors areas/domains were explored; three were parent related (personal factors, history of parents' childhood abuse, and parental attitude toward punishment), and two were family/community effects and factors specific to the child. SPSS was used for data entry and analysis. Descriptive analysis included computation of mean, median, mode, frequencies, and percentages; Chi-square test and *t*-test were used to test for statistical significance, and regression analysis performed to explore relationships between child abuse and various risk factors.

**RESULTS:** Thirty-four percent of the parents reported a childhood history of physical abuse. Almost 18% of the parents used physical punishment. The risk factors associated significantly with child abuse were parents' history of physical abuse, young parent, witness to domestic violence, and poor self-control. Child-related factors included a child who is difficult to control or has attention deficit hyperactivity disorder (ADHD). Parents who did not own a house were more likely to use physical punishment. Abusive beliefs of parent as risk factors were: physical punishment as an effective educational tool for a noisy child; parents' assent to physical punishment for children; it is difficult to differentiate between physical punishment and child abuse; parents have the right to discipline their child as they deem necessary; and there is no need for a system for the prevention of child abuse.

**CONCLUSION:** The causes of child abuse and neglect are complex. Though detecting child abuse may be difficult in primary care practice, many risk factors can be identified early. Parents' attitudes can be measured, and prevention initiatives, such as screening and counseling for parents of children at risk, can be developed and incorporated into primary care practice.

## Key words:

Child abuse, emotional, perception, physical, Primary Health Care, risk factors

## Introduction

Child abuse is "an act or failure to act on the part of a parent or caretaker that

results in death, serious physical or emotional harm, sexual abuse or exploitation; or an act or failure to act which introduces an avoidable

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danger or substantial damage to anyone under the age of 18.”<sup>[1]</sup>

Worldwide, several studies have been carried out to estimate the problem of child abuse. A national UK study of nearly 3000 young adults reported that 21% of the surveyed had experienced physical abuse, 11% had experienced sexual abuse before the age of 16, 6% had experienced neglect, and 6% had experienced emotional abuse as children grow up.<sup>[2]</sup>

Children in the Arabian Peninsula are subjected to many forms of neglect and child abuse. Abuse is ignored, tolerated, or even accepted as a form of discipline.<sup>[3]</sup> A population-based survey in Yemen discovered the widespread use of physical punishment and cruelty to children in homes, schools, and juvenile centers, ranging from 50% to 80%.<sup>[4]</sup> Eleven reports from all over Saudi Arabia identified forty abused children: 24 with physical violence, six with sexual assault, four with multiple sexual partners, and six with neglect. In five children, the outcome was fatal.<sup>[3]</sup> The National Family Safety Program (NFSP) was established in 2005 by the Saudi government and administratively linked to King Abdul Aziz Medical City (KAMC).<sup>[5]</sup> The establishment of NFSP has resulted in improved reporting, and in 2008, the KAMC emergency room alone reported forty child abuse cases. Of these, 47% were of physical abuse, 32% were of neglect, 13% were of sexual abuse, and 8% were emotional abuse. The most common perpetrators of child abuse were parents.<sup>[6]</sup>

Children who live in family conditions with the factors mentioned below are more likely to encounter violence. These risk factors include, but are not limited to, poverty, parents’ smoking, parental history of being abused themselves as children, lack of education, stress, high expectations from a child, parents’ poor coping skills, poor impulse control, social isolation, domestic violence, attention deficit disorder, and dangerous neighborhood.<sup>[7,8]</sup>

This study was carried out because, despite many reports of child abuse, especially in our society, the risk factors of physical and emotional child abuse have rarely been investigated. It was assumed that parents who attend local primary care clinics are less likely to report child abuse, but may not hesitate to explore the known risk factors associated with physical and emotional abuse of children.

## Materials and Methods

This cross-sectional survey was conducted by distributing a self-administered questionnaire to parents of children attending three primary health care centers (PHCC)

serving National Guard employees and their families living in Riyadh. Nearly 30,000 children attended these clinics. Using the formula sample size:  $N = (Z)^2 p (1 - p) / d^2$ , assuming prevalence  $p = 15\%$ , accuracy  $d = 0.05$ , alpha of 0.05, and power of 0.8, the calculated sample size was 200. Since no large scale studies on prevalence of child abuse in KSA were available, we used child abuse prevalence of 15% as reported by the U.S. Department of Health and Human Services.<sup>[9]</sup> Parents were given the questionnaire when they came to the Primary Health Care centers during the six month study period between October 2009 and March 2010. They were sampled each clinic day by matching the last four digits of their medical record number with a random number chosen each day. The forms were distributed to the parents to be completed as they waited to be seen by the physician and collected by the nursing staff.

All data were maintained in a secure fashion by separating participant’s identification from the associated data. Written informed consent was taken by Arabic speaking nursing staff. The nursing staff were trained to check for and deal promptly with incomplete forms and missing data. They had enough time to answer any question the participants had regarding the study. Parents were informed about the objectives of the study and were assured of their right to accept or refuse to participate or withdraw at any moment if they so desired. They were reassured that withdrawal or refusal to participate would have no effect whatsoever on the care they would normally receive.

All data were analyzed as total population in a manner that maintained individual privacy. Ethical clearance was obtained from the Department of Family Medicine Research Committee before conducting the research.

An Arabic language self-administered questionnaire was devised and modified from several studies that explored risk factors for child abuse. This included “Childhood Trauma Questionnaire” by Bernstein which measures the prevalence of child abuse and consists of 53 items and includes the type and severity of child abuse,<sup>[7]</sup> and “Parenting Profile Assessment” by Anderson that evaluates the potential of parents to be abusive or nonabusive. Anderson’s instrument had a sensitivity of 95.8% and a specificity of 98.6%.<sup>[8,10]</sup> The questionnaire, reviewed by a panel of two consultant pediatricians, was first drafted in English, translated into Arabic, and translated back into English and put in a final version of Arabic for content validity.

The last 45 questions on the survey questionnaire had 11 subqueries. Five main risk factor areas/domains were explored in the study: three were parent related and dealt with personal factors, parents/childhood history,

and parents' attitude toward punishment. The other two domains were family/community effects and factors unique to the child that may lead to being physically or emotionally abused by the parent.<sup>[10]</sup>

Each question was treated as an individual variable for descriptive analysis. However, for uniformity of scoring and logistic regression, variable values ranging between 1 and 4 were collapsed into categories based on either Yes/No or Agree/Disagree and reassigned new values 0 or 1 based on the negative or positive direction of the question in the combined score of the domain. Since most of the domains were about the presence or absence of risk factors, the presence of a risk factor received a value of 1 and absence was equal to 0. Cumulative scores for each domain were calculated by adding the numbers for all answers. Cumulative scores of each domain were treated as continuous variables.

Data were entered and analyzed using Statistical Package for Social Sciences, IBM SPSS for Windows, Version 18.0, Chicago, SPSS Inc. Descriptive analysis included computation of mean, median, mode, frequencies, and percentages; Chi-square test and *t*-test were used to test for statistical significance, and linear and logistic regression analysis performed to explore relationships between child abuse and various risk factors. For logistic regression, punishment categories were selected as the dependent variable, modified to the physical and nonphysical methods. The remaining questions were treated as independent variables grouped into five risk factor domains. Each grouped set (domains) of variables was first regressed on the dependent variable (punishment method) to identify the significant factors within each group using the forward step-wise logistic regression method. No interaction terms were used in the group-subset logistic analysis. The significant factors from each logistic subset were then finally regressed together with the dependent variable, and some logical interaction terms of  $1 \times 1$  were included in the final regression analysis.

## Results

A total of 220 questionnaires were distributed, 205 (93.2%) agreed to participate and five forms were discarded for being incomplete, giving a final response percentage of 91%. Parents' ages ranged from 18 to 77 years, with a mean  $\pm$  standard deviation of  $35.8 \pm 11.4$  years. The majority (69.5%) of the sample were aged between 27 and 45 years with more males (63.8%) than females (36.2%). Nearly 70% had a job; about 40% reported that their job was stressful. Almost half of them (47%) lived in their own house, and 22% were smokers [Table 1].

Nearly 15% of the parents reported negative feelings toward their children and 8.8% had higher than normal

expectation of their children. Nearly a third of the parents felt frustrated in dealing with their child's behavior and over 60% of the parents complained about highly stressful lives. Parents who reported poor coping skills were 31%. Over 40% of parents stated that they had low self-esteem, and nearly 60% felt that they had poor impulse and anger control.

Approximately 34% of the participants reported a history of childhood physical abuse. The most common perpetrators of childhood physical abuse in a descending sequence were parents (48.8%), teachers (34.9%), others (10.5%), and step-parents (6.5%) [Figure 1]. Of those who were physically abused as children, two-thirds recalled that their first physical abuse was when they were aged between 5 and 10 years. About 30% of the parents had witnessed violence between their parents or family members. Only 3% reported a history of drug or alcohol abuse in their families, fewer than 20% had lived with relatives rather than parents or in a shelter as children. Table 2 shows the parental risk/beliefs and attitudes that may lead to physical or nonphysical abuse of the child.

**Table 1: Sociodemographic characteristics of participants**

Characteristics	N (%)
Age (mean $\pm$ SD)	35.8 $\pm$ 11.4
Sex	
Male	127 (63.8)
Female	72 (36.2)
Married status	
Married	179 (97.8)
Educational level	
Primary school	11 (5.5)
Intermediate school	23 (11.6)
Secondary school	69 (34.7)
University/higher	96 (48.2)
Occupation status	
Working	139 (70.2)
Stressful job	
Yes	57 (40.1)
No	85 (59.9)
Income rate/month	
<5000	43 (27)
5001-10,000	67 (42.1)
>10,000	49 (30.8)
Number of children	
1-3	100 (59.2)
>4	69 (40.8)
Type of housing	
Own	93 (46.7)
Rent	91 (45.7)
Governmental	15 (7.5)
Smoking status	
Smoker	42 (21.8)

SD = Standard deviation

Over 93% of parents lived together in the same home. Marital conflicts were reported in 21.2% of the homes in our sample. Over 33% of the parents believed that their children watched violence on TV while 8.6% thought that their neighborhood was dangerous. As reported by the parents, 7.6% of the children were premature/ had low birth weight, 7.7% had physical or cognitive difficulties, there were 12.6% with aggression or ADHD [Table 3], and 9.8% with chronic diseases, nearly 90% rewarded their children for positive behavior and 85% punished their child's negative behavior. Most parents (50%) reported shouting at their children as punishment, 30% deprived the children of something they like, 3% punished by isolating the child in a room, and <18% resorted to corporal punishment such as hitting.

Characteristics of parents who used physical punishment were compared with those who used the nonphysical means of punishment to discipline their child. It was found that parents who were more likely to use physical means of punishment were 5 years younger, compared to those who used nonphysical methods (32.42 years vs. 37.41 years). Not owning a house was associated with the use of physical punishment. No statistically significant association was found between jobs, income, number of children, smoking status, stressful life, marital conflict, relatives living with family, or parents' history of depression and physical abuse of children [Table 4].

**Table 2: Parents' responses to risky attitudes toward abuse**

Risky attitude/belief	Agree	Percentage
Slap a child for discipline	23/186	12.4
Hitting is effective in noisy kids	66/174	37.9
Hitting does not hurt	33/169	19.5
Acceptable for parents to hit	52/174	29.9
Right of parents to discipline	129/182	70.9
Difficult to distinguish between abuse and discipline	110/175	62.9
Hitting is beneficial as an educational tool	110/179	61.5
Hitting is acceptable	106/177	59.9
Law not needed for abuse prevention	129/176	73.3
No law needed to punish abusive parents	144/176	81.8
Hitting is not child abuse	145/179	81.0

**Table 3: Child-related risk factors for child abuse**

Risk characteristics	N (%)
Physical or cognitive disabilities	14 (7.7)
Premature or LBW	13 (7.6)
Aggressive or with attention deficits	22 (12.6)
Difficult mood (temper tantrum)	73 (47.4)
Noisy	93 (58.5)
Chronic disease	17 (9.8)
Poor in academics	25 (10.2)
Disobedient	115 (46.8)

LBW = Low birth weight

Parents who had a childhood history of abuse were more likely to hit a child. Being a witness to violence between parents was also found to be associated with physical punishment [Table 4].

Parents who thought that their child has a difficult temperament were more likely to abuse their child physically, and noisy children were more likely to be beaten up. Parents who believed that they had poor coping skills and those who thought they had poor impulse control were more likely to hit their child. Parents who believed that their child was difficult to control were more likely to hit their child. Although mothers were more likely to use physical punishment than fathers, working mothers were less likely to hit their children than nonworking mothers. Parental belief that it was acceptable to discipline a child by hitting or that hitting was not child abuse were more likely to use corporal punishment [Figure 2].

Table 5 shows the mean scores of each domain for parents using physical and nonphysical methods of discipline. Most parents who used physical methods to control their children scored higher on the risk factor domains except the attitude score. The parental childhood risk score was found to correlate with the current parental risk factor score on linear regression.

**Table 4: Factors related to increased likelihood of a parent to use physical versus nonphysical punishment method to discipline the child\***

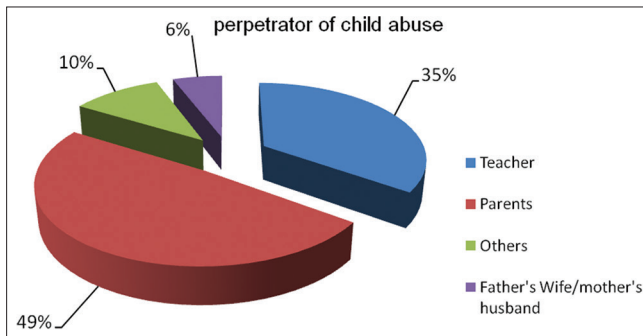
Risk factor	$\chi^2$	p-Value
Parental age 30 years or less	6.98	0.008
Female parent	4.84	0.028
Working parent	4.24	0.039
Lack of house ownership	10.92	0.001
Parental history of abuse as child	23.56	0.001
Witnessed violence between parents as a child	11.22	0.001
Domestic violence on mother of parent	18.16	0.001
Parent having medical problem	5.43	0.02
Poor impulse control of parent	8.84	0.003
Belief that it is acceptable for parents to hit	17.57	0.001
Belief that hitting is not a form of child abuse	7.67	0.006
Poor coping skills of parent	7.13	0.008
Violence watched by kids on television	4.39	0.036
Poor social support from family	5.5	0.019
Noisy child	6.64	0.01
Feel difficulty in controlling child	13.6	0.001
Not rewarding child's positive behavior†	14.84	0.001
Premature or LBW infant†	12.44	0.001
Child with HADD‡	9.40	0.002
Poor emotional support between parents‡	12.74	0.001
Parental history of alcohol or drug uses‡	5.45	0.02
High expectation for kids†	13.25	0.001

\*The punishment method (Q 29) was reduced to categories of physical (hitting and shaking child) versus nonphysical (shouting, isolation, depriving wants) method, †The 2x2 table had 1 cell (25%) with an expected count <5. LBW = Low birth weight, HADD = Hyperactivity attention deficit disorder



**Table 5: Mean domain scores for physical and nonphysical punishment**

Domain score	Physical versus nonphysical punishment	n	Mean	t-test	p-Value
Family risk factor score	Nonphysical punishment	103	5.00	2.0	0.048
	Physical punishment	19	5.84		
Parent attitude risk factor score	Nonphysical punishment	110	5.84	0.177	0.86
	Physical punishment	21	5.90		
Child risk factor score	Nonphysical punishment	106	2.48	4.9	0.001
	Physical punishment	26	4.15		
Parent risk factor score	Nonphysical punishment	116	5.82	2.2	0.028
	Physical punishment	27	6.85		
Parent as child risk factor score	Nonphysical punishment	142	1.03	5.22	0.001
	Physical punishment	27	2.41		

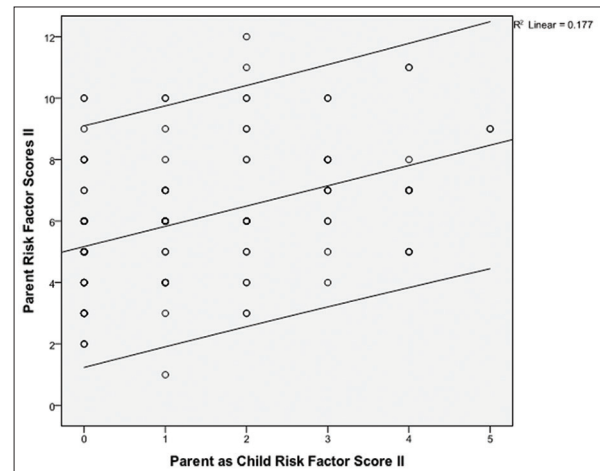


**Figure 1:** Distribution of perpetrators of child abuse

The final logistic regression model showed that a parent is more likely to use physical punishment rather than a nonphysical method to discipline the child, if she/he does not own a house, has a childhood history of being abused, feels that the child is difficult to control or has ADHD, not sure about parent's right to discipline a child, finds it difficult to differentiate between punishment and discipline, and does not think a system of preventing child abuse is necessary.

## Discussion

The present study was conducted to identify risk factors for child abuse with particular emphasis on physical abuse and to explore parental attitude and belief in using physical punishment as a means of disciplining their children. Over two-thirds of our participants, almost 85%–90% of parents, did not have difficulty in controlling their child. Rewarding them for good behavior was equivalent to punishing for bad behavior. More than half of the parents attempted to control their children by shouting, and less than a fifth resorted to physical punishment to discipline. This percentage of physical child abuse reported in our study is similar to the prevalence of physical abuse reported in population-based studies from the UK, Australia, and the US.<sup>[9,11,12]</sup> The most common reason for punishment as reported by parents in our study was disobedience (almost 70%).



**Figure 2:** Scatter plot showing the relationship between parent as child risk factor score and parent risk factor score

In our survey, parents who were more likely to use physical means of punishment were 5 years younger on an average than those who used a nonphysical means of punishment. It can be assumed that older parents have older children, who are perhaps less noisy or less disobedient to their parents. Schumacher *et al.* found no consistency of parental age as a risk factor for some forms of maltreatment.<sup>[13]</sup> Numerous studies had revealed that mothers who were young when they had their child showed higher rates of child abuse than older mothers.<sup>[14,15]</sup>

Childhood history of the parents plays an enormous part in how they behave as parents. According to Adams, those who did not have their private needs met tend to find it very hard to meet the needs of their children.<sup>[10]</sup> It has been suggested that about one-third of all individuals who were mistreated as children will expose their children to abuse.<sup>[16]</sup> Our study showed similar findings, where the parents who had a childhood history of abuse were more likely to hit rather than resolving issues with their children by nonphysical means, and 34% of our participants were physically abused as children.

Parents in our study who had witnessed violence between their parents were more likely to hit as a means of punishment. Gelles had similar results which showed that children who observed violence between their parents or caregivers may learn violent behavior and may also tend to perceive violent behavior as appropriate.<sup>[17]</sup> In addition, it was observed that parents who had children witnessed any violence done to their mothers were more likely to use corporal punishment to discipline their children. Edleson *et al.* similarly concluded that 30%–60% of families in which spouse abuse took place also had child abuse.<sup>[18]</sup> Domestic abuse witnessed as a child in our study participants was 27%. Children who live in a home with violence and observe parental violence may be victims of physical abuse themselves and may have been ignored by parents because they were focused on their partners or unresponsive to their children because of their fear.<sup>[19]</sup> Margolin and John stated that a child who witnesses parental violence is at a risk of experiencing harmful emotional consequences of witnessing that scene of parental violence.<sup>[20]</sup>

Our study shows that parents who believed that they had poor coping skills, poor impulse control, and felt that they had a noisy child found it difficult to monitor their child and were more likely to hit their child than using nonphysical means of punishment. Black *et al.* and Schumacher *et al.* have described such child factors as violence, challenging tempers, and behavioral problems or the parental perceptions of such problems as being associated with the increased risk for all types of child abuse.<sup>[14]</sup> Black *et al.* described physically abusive or neglectful parents as people with low self-esteem, with an external locus of control (i.e., who believe that events are determined by chance or outside forces beyond one's personal control), poor impulse control, depression, anxiety, and antisocial behavior.<sup>[21]</sup>

While Chalk *et al.* propose that infants born prematurely or with low birth weight may be at an increased risk of mistreatment,<sup>[22]</sup> this was not the case in our study, as infant prematurity or low birth weight was not statistically significant. However, the reason for this may be that only a small number of parents reported these risk factors. An interesting finding in our study was the association of not owning a house with the use of corporal punishment shown in logistic regression analysis. This may be a proxy indicator of low income. Coohy C, *et al.* showed that physical abuse is associated with stressful life events, parenting stress, and emotional distress.<sup>[23]</sup> Besides, specific stressful situations (e.g., losing a job, physical illness, and marital problems) may exacerbate certain issues that some family members have such as anxiety, or depression, which may, in turn, aggravate the level of family conflict and abuse.<sup>[24]</sup>

This study was done on individuals who attended the National Guard primary care complex and who had a similar military background and socioeconomic status. Thus, the results cannot be generalized to cover the general population. Child abuse is a sensitive issue that is not easy for parents to discuss. Reluctance of the part of some parents to mention some risk factors in our questionnaire was expected. However, we assured all participants of the confidentiality of this information and its use for research only. The association of parents' experience of physical abuse and recall of the home environment of their childhood is subject to recall bias. Our sample size was reasonable, yet some results were inconclusive because of the lack of specific reported cases. Further exploration with larger multicenter studies or preferably population-based survey is necessary for any definitive conclusion to be drawn.

Overall, this study confirms most of the risk factors that could lead to physical abuse or corporal punishment of a child at the hands of the parent. As other studies have shown, the parent's own history of abuse as child, being a witness to violence between parents, and specific domestic violence could have an impact. Furthermore, parental perception of a child as aggressive, noisy, difficult to control, or inattentive was found to be significant. Parents' perception of themselves as lacking impulse control, having poor coping skills, and the belief that physical punishment was not abuse were the risk factors associated with physical punishment of children. In addition, the parents' lack of concern for the importance of a reporting system for child abuse was also a risk factor.

## Conclusion

The child abuse/physical abuse is common. As also reported by Willis *et al.*, the causes of child abuse and neglect are complex and that detecting child abuse in primary care practice could be challenging. However, many risk factors can be identified early by monitoring parents' attitudes. It is also possible to develop prevention initiatives such as screening and counseling for parents of children at risk in primary care practice.<sup>[25]</sup> Abuse and lack of care could be dealt with by a broad spectrum of services such as community awareness, parent education, and home visit for families. It is recommended that family education programs should be designed for new or expectant parents, and that community-based support services should be set up in primary care centers, and professional awareness campaigns must be organized to prevent child abuse. Also, it is recommended that special attention should be paid to parents with a childhood history of abuse since we found this to be a significantly associated factor. Family physicians can take the lead by

screening for risk factors of child abuse or early signs of violence and coordinate referral services that connect individuals at risk with resources in health care and the community.

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## Conflicts of interest

There are no conflicts of interest.

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